## SUMMARY OF PROPONENTS' COMMENTS

Those who provided testimony in support of the rulemaking listed a number of reasons for adoption of the rule amendment:

- 1. The Montana Constitution and the Metal Mine Reclamation Act require adoption of the rule amendments. The constitutional right to a clean and healthful environment requires the pollution be prevented rather than mitigated or remediated. The Public Trust Doctrine also imposes this requirement. The only way to implement this requirement is to prevent pollution from entering the ground water. Furthermore, the Metal Mine Reclamation Act requires that reclamation be completed within two years of cessation of mining unless the Department grants an extension. Reclamation includes water treatment, and the rule amendment merely implements this requirement.
- 2. Section 82-4-336(10) requires that the reclamation plan must provide sufficient measures to prevent water pollution. Section 82-4-336(12) requires the plan to provide measures to prevent objectionable ground water discharges. The proposed rule would meet these requirements and the Board therefore has authority to adopt it.
- 3. The "clear and convincing" standard is an established standard. It appears in one hundred Montana statutes and in several hundred cases. The Department of Natural Resources and Conservation uses this standard in determining whether to issue water use permits and the Department of Environmental Quality uses this standard in determining under the Major Facility Siting Act whether construction of a power plant is economically feasible.
- 4. Adoption of the rule amendments will lead to better up-front planning by the mining companies. Because of experience with previous mines and continuing evolution in science and technology, the Department and mining companies can better predict the hydrologic consequences of various mining plans. This will require mining companies to design mines to avoid perpetual water treatment and allow mining companies to demonstrate by clear and convincing evidence that perpetual water treatment will not be necessary. Five mines have received permits in Alaska in the last 20 years. Four of those will not require long-term or perpetual water treatment. New Mexico has had a law in place for over 10 years that provides that a permit to mine cannot be granted unless the mine is designed to meet environmental requirements without perpetual care. Despite this rule, the mining industry in New Mexico is larger than Montana's. Existing mines in Montana and in other states could receive a permit under the proposed rule.
- 5. The proposed rule refers to 82-4-336(3). In addition to the two-year requirement, that statute allows the Department to grant extensions of the two-year requirement. It is therefore not correct to state that the proposed rule would prohibit any mine for which water treatment could not be completed within two years.
- 6. While it is possible to predict with sufficient accuracy whether or not long-term or perpetual water treatment will be necessary, it is not possible to assess with sufficient

accuracy the appropriate bond level for permanent water treatment. Experience with the mines described above demonstrates that perpetual treatment requirements and costs cannot be accurately predicted. Where perpetual treatment is anticipated, it is impossible to determine an amount that will provide adequate income in perpetuity. Furthermore, a bond may become uncollectible due to the insolvency of the surety. Thus, bonding will not solve the problem. Only adoption of the rule would keep the taxpayers from being required to pay for long-term water treatment as occurred with the Zortman/Landusky, Basin Creek, Kendall and Beal Mines.

- 7. The answer to the problems the proposed rule is designed to address is not bonding. The rule was proposed by the petitioner to eliminate the problem of perpetual pollution, and bonding will not eliminate it.
- 8. The economic analysis done by the Department is too general to be useful in determining economic impacts of the proposed rule and overstates those impacts. The Department's alternatives analysis is flawed in assuming there is an "irreconcilable conflict" because the rule is based on uncertainty but requires certainty. The "clear and convincing" standard does not require absolute certainty. Knowledge gained from previous operations will allow sufficient projection of whether perpetual treatment will be necessary.
- 9. The proposed rule does not create a problem in the situation in which during the operation it is determined that perpetual water treatment will be necessary. In that situation, the existing regulatory framework would allow the Department to amend the reclamation plan and bond accordingly.
- 10. While the proposed rule does single out the mining industry, it does not do so unfairly. Mining is the only industry that is allowed to perpetually pollute Montana's water.
- 11. Another supporter cited the adverse effect on ground water quantity. Adoption of the rule amendment would prohibit the practice of allowing contaminated water to infiltrate ground water under the mining operation and then capturing and treating the water. The commentor argued that this capture and treat practice interferes with natural ground water flow.
- 12. Another commentor stated that passive treatment is not effective in Montana because of the harsh climate.
- 13. A number of officials and members of the Fort Belknap Indian Community submitted testimony relating to the Zortman and Landusky Mines. They stated that, since mining commenced, there have been a number of health problems on the Reservation, such as skin rashes, thyroid problems, and heart problems, although these problems haven't been proven to be related to the mine. They stated that the supply of bottled water at stores near the Reservation is unreliable. They pointed out that water quality in Swift Gulch continues to worsen, even though mining has ceased. They pointed out that

water is being discharged from the water treatment plants at the mines without a discharge permit. Tribal members were split on the issue of whether the grandfather clause should be adopted.

- 14. Fort Belknap Community Council President Doney testified that, had the pollution from the Zortman and Landusky Mines been prevented, the \$20.5 million that the state is paying at the mines could have been better used for creating non-mining jobs, building youth centers, providing better elder care, constructing a new water treatment plant, funding psychologists and counselors to address the high suicide rate, or building a dialysis center.
- 15. A number of supporters argued that the rule is necessary because the reclamation plan for the Rock Creek Mine allows for discharges of water to the Clark Fork River that will require perpetual water treatment. They argue that much money has been spent to clean up the river and the risk of recontamination of the Clark Fork from this mine is not acceptable.

## **SUMMARY OF OPPONENTS' COMMENTS**

On the other hand, persons opposing adoption of the rule amendment cited a number of reasons for their recommendations:

- 1. Many persons commented that no mine would be able to make the required demonstration, even by clear and convincing evidence. They cited the economic benefits that would be lost as a result. Others indicated that the technology is not capable of predicting with the degree of certainty necessary to provide clear and convincing evidence. Others commented that the clear and convincing standard is indefinite enough that it would lead to litigation challenging permit decisions. Similarly, another person commented that the rationale for the rule is the uncertainty of determining the necessity for and scope of treatment, but compliance with the rule requires certainty. Some commentors stated that the demonstration requirement, even if it can be complied with, will discourage mining. Most persons who commented that mining would be precluded or discouraged argued that the state and their communities would lose substantial economic benefits as a result. These benefits include jobs, tax payments, business for mine suppliers, and secondary economic benefits for main street businesses. Others indicated that adoption of the rule would have a negative effect on production of needed minerals, some needed for manufacture of pollution control equipment and shift mineral development to foreign countries that have less stringent environmental protections, thus having a negative impact on the environment and the trade balance.
- 2. Other opponents stated that, based on advances in technology and experience over the last 15 years, predictive capacity is available to accurately predict whether long-term water treatment will be necessary and to design an effective long-term treatment plan. They stated that mines can therefore bond for long-term treatment and that the proposed rule is therefore unnecessary.

- 3. Other opponents cited the fact that other facilities, such as landfills, sewage treatment plants, and septic systems are allowed to treat discharges and are allowed mixing zones so that their discharges do not have to meet water quality standards at the point of discharge. They argued that prohibiting water treatment and mixing zones as a means to comply with water quality standards is unreasonable and discriminatory. One commentor added that, if the prohibition on mixing zones is to be adopted, it should be in the water quality rules and be applicable to all types of dischargers. Another commentor stated that, based on impaired streams information in Department files, mining accounts for less than .2% of water quality degradation in Montana.
- 4. Other opponents stated that the rule is not necessary to protect water quality because other laws and rules are in effect and enforced by EPA, DEQ, the Forest Service, and the BLM. They pointed out that the proposed rule would not improve water quality standards. One commentor stated that the rule amendment is not necessary because today's mining companies can be trusted to protect the environment. Another commentor stated that the rule change is unjustified because it would apply even to mining operations that are located in remote areas away from communities and drinking water supplies.
- 5. The Forest Service and BLM argued that the rule would discourage concurrent reclamation because operators would not want to commence reclamation of permit area or individual mine facilities for fear of triggering the two-year requirement.
- 6. The BLM and Forest Service argued that the rule amendments would have a detrimental effect of precluding bonding for long-term water treatment if it becomes necessary after permit issuance because operators would contest the need for it to avoid invalidation of the permit. The BLM also commented that in a recent nationwide rulemaking, the BLM had considered banning operations that would require water treatment for more than 20 years. The record in that rulemaking indicated that the capability to make this prediction does not exist. In that rulemaking process, the EPA recommended against adoption of this rule and recommended that the BLM instead bond for perpetual water treatment. BLM indicated that it concluded that the best approach was one that emphasizes source control but bonds for permanent treatment if it appears necessary at any time.
- 7. The Forest Service commented that the rule amendments would prevent legitimate mining activities on national forest lands and application of the amended rule to national forest lands may be preempted by federal laws and regulation.
- 8. Other commentors stated that adoption of the rule amendments would create or, confirm, or advance the negative image of Montana with regard to regulatory stability and business-friendly atmosphere, thereby reducing hard rock mining and exploration and their attendant economic benefits. One commentor suggested that other industries, such as the coal conversion industry, would be discouraged from developing in Montana because of regulatory instability.

- 9. Some commenters stated that the basis for the petition, the granting of which led to the commencement of this rulemaking proceeding, is not valid. They pointed out that the examples given for the need for the rule amendment, the Golden Sunlight, Beal Mountain, Kendall, and Zortman and Landusky Mines, are all open pit gold mines that use cyanide to process the ore and that would therefore not be granted a permit today because of passage of I-137, which ban open pit gold or silver mines that use cyanide.
- 10. Some opponents stated that the term "treatment" is undefined and could include such things as sediment basins for storm water, engineered wetlands, and other passive treatment options, that can be used until vegetation is stable. Other commentors contended that use of the terms "toxin" and "carcinogen" creates a moving target because different substances are considered toxins or carcinogens depending on ongoing health studies. One commentor stated that the rule would prohibit use of natural attenuation to meet standards.
- 11. Other opponents, including a number of legislators, stated that this change would be such a drastic change in state policy with such major impacts that it should be made, if at all, by the legislature, which is composed of elected officials, as opposed to an appointed board.
- 12. A number of commentors criticized application of the two-year rule to water treatment. One stated that most tailing impoundments take more than two years to dewater, and the water that leaves the impoundment must be treated. Another asked how the agency could grant an extension to the 2-year period at the time of permit issuance. Other commentors stated that the 2-year rule would preclude the use of sediment basins for storm water, engineered wetlands, and other passive treatment options, that can be used until vegetation is stable. Other commentors pointed out that nitrate residues from blasting are present at almost all mines and require water treatment for more than two years. Another commentor stated that many mining operations that will not require permanent water treatment could not meet the two year requirement.
- 13. Several commentors questioned the Board's authority to adopt the rule for the following reasons:
  - (a) They indicated that the Constitution, which is directed to the Legislature, does not give the Board any authority and that the Board's rulemaking authority is contained in the Metal Mine Reclamation Act, which implements the constitutional provision. They contend that the Board receives its rulemaking authority solely from statute. They further argued that under case law of the Montana Supreme Court, a rule cannot contradict statute and must be in harmony with the statute. Rules that violate these principles constitute a violation of the separation of powers doctrine in that they constitute a usurpation of legislative authority by an executive branch agency.
  - (b) They argued that the 2-year requirement does not apply to water treatment because:
    - (i) the 2-year requirement applies upon completion or abandonment of the operation "on that portion of the complex." They argued that this

- requirement must be read in tandem with 82-4-336(2), which applies to dirt work and revegetation. They argued that a requirement to complete water treatment on a portion of the complex is nonsensical;
- (ii) 82-4-336(7) allows the operator of a mine with a pit that exceeds two acres to choose different alternatives for dealing with pit water, one of which is water treatment;
- (iii) 82-4-337(9)(b)(iv) and (10) require mitigation of offsite impacts and prevention of air and water pollution and degradation of adjacent lands. They argued that this authorizes and requires water treatment.
- (c) They argued that the rule would as a practical matter prevent hard rock mining in the state, which contravenes one of the purposes of the Metal Mine Reclamation Act, which is to encourage mining.
- (d) They argued that the adoption of an evidentiary standard is beyond the authority of the Board. Under 82-4-351(2), the Department's decision to deny a permit must be based on a preponderance of the evidence. They point out that, under a recent Supreme Court decision, an agency does not have authority to establish a standard of review for contested cases.
- (d) They argued that the rule is void because the term treatment is unconstitutionally vague and because it unconstitutionally treats the mining industry different from other industries.
- (e) Finally, one commentor pointed out that, in 2005, the Legislature rejected SB 232, which would have specifically given the Board the authority to adopt water quality standards for carcinogens that are more stringent than federal standards.
- 14. One commentor provided an analysis of bonding and final reclamation costs at Zortman and Landusky Mines that was done by a professional geologist. She concluded that the bonding deficiencies that occurred at those sites would not occur today for several reasons. First, the science regarding prediction of acid generation was not developed when those mines were permitted and now is. Second, the mine was permitted in a piecemeal fashion, and a comprehensive analysis of the mine plan was therefore not performed. Today the mines would be required to provide a life of mine plan. Third, the Department today would require different location of the waste dumps and leach pads, which would reduce infiltration to ground water. And finally, bonding laws and procedures have been strengthened since the Zortman and Landusky operations were permitted.
- 15. Montana Resources commented that the proposed rule would not have allowed it to be considered in temporary closure several years ago because it does not cite section (3) of the temporary closure rule (17.24.150), which is the section under which the Butte operation was considered to be in temporary closure.
- 16. One commentor stated that the proposed rule amendments would create problems for mines with ore bodies that are below the water table, such as the Stillwater Mine. The commentor stated that water treatment should be used as a tool to allow mining of these ore bodies. He stated that treatment technologies are advancing and the requirement to base permit decisions on current technology is flawed.

17. Another commentor stated that the real issue is not water protection, it is bonding. He commented that in the past few years the Department has closed gaps in bonding.

## DEPARTMENT RECOMMENDATION

The Department recommends against adoption of the rule amendments because significant changes in law and technology have occurred since the permitting of the mines that have led to water pollution and taxpayer expense, because of potential problems with implementation of the proposed rule amendment, and because of the potential economic effects.

The changes in law and technology, outlined below, have substantially reduced the chances that the problems that led to the submission of the petition for this rulemaking will occur again. Those changes are:

- -Passage of I-137, which bans open-pit gold and silver mining using cyanide leaching. The Zortman and Landusky, Kendall, and Beal Mountain Mines, all of which have either caused or may cause expenditure of taxpayer money for water treatment, could not receive a permit under this initiative. Furthermore, the Golden Sunlight Mine, which will require long-term water treatment but is bonded for that treatment, could not receive a permit.
- -Changes in bonding laws. The Department is now required to do annual bond overviews and five-year comprehensive bond reviews.
- -Changes in rock sampling and testing techniques and in bonding practices. One of the reasons for the problems at Zortman and Landusky was that host rock testing failed to detect the acid generation potential of some of the rock. Technology has now evolved to allow more accurate prediction of acid-generation potential; and, contrary to early practices, the Department bonds specifically for water quality compliance.
- -Changes in containment and isolation technology. In recent years there have been advances in capping and lining technology. This will reduce the amount of water for which long-term treatment will be necessary.
- -(While these changes in law and practice do not totally eliminate the possibility of water contamination or taxpayer expense, the proposed rule does not do so either. It is possible that under the proposed rule the Department could permit an operation that at a later date is determined to need long-term water treatment, and these same problems could develop.)

Furthermore, adoption of the proposed rule amendments has the following potential problems and effects:

- -Many mine applications could not meet the conclusive demonstration or the clear and convincing test. This means that many of the predicted significant economic impacts would occur.
- Commentors have raised substantial issues pertaining to the Board's authority to adopt at least portions of the rule. Also, the Forest Service has indicated that application of the rule on national forest lands may be preempted by federal law. Should the Board adopt the proposed rule, these issues could only be resolved by litigation.
- -The 2-year requirement is not reasonable. Most significant mines could not meet it, even those that would not need long-term water treatment. Extensions would be necessary for nearly all mines and would be subject to challenge.
- -The rule prohibits passive treatment, which requires little maintenance and can be highly effective.